## Lakes, Ponds and Reservoirs

## For more information this project please contact:

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## **Management of Sport Fisheries in Urban Lakes**

Urban fisheries programs provide fishing opportunities in areas of the state with the highest densities of people. These efforts can increase fishing opportunities for mobility-impaired anglers, increase the quantity and quality of access available to all anglers, increase the quality and density of fish available to anglers, benefit aquatic habitat available for public enjoyment, and help recruit new anglers. We are continuing a 5-year project that strives to understand the varied aspects of urban fisheries in lowa including: an assessment of physical, chemical and biological components of each waterbody, a similar assessment of important components of the watershed, assessments of existing fisheries, and identification of those management alternatives and partnerships that would benefit quality and quantity of fishing available to urban anglers. This work has revealed many important revelations.

Testable chemical contaminates in 3-waterbodies were at acceptable levels. Mercury is often the contaminant of greatest concern in fish tissue, not only in Iowa, but worldwide. Mercury is a naturally occurring element in the environment that can accumulate in streams, rivers, lakes, and oceans. Fish can absorb mercury as they feed in these waters. The Iowa Department of Public Health (IDPH), using United States Environmental Protection Agency (USEPA) guidance, determined that all fish containing less than 0.2 ppm mercury are safe to consume with no meal restriction. North Banner Lake initially had mercury concentrations in largemouth bass tissue greater than 0.4 ppm. However, later sampling discovered the concentration had decreased to acceptable levels.

Evaluation of fisheries at urban fishery lakes: Banner Lakes, Blue Heron Lake, Easter Lake, and Lake Manawa revealed diverse fish communities. Lake Manawa and Easter Lake were the highest quality and contained fish in the best condition of all the lakes. Growth rates of both walleye and hybrid striped bass were very good in Lake Manawa. Combined with the population estimate, data revealed both species could be stocked at higher rates. Channel catfish were by far the most sought species at Lake Manawa with walleye a far second at 8%, and anglers barely know hybrid striped bass exist at Lake Manawa (sought by 1% of anglers). It makes little sense to maintain these fisheries if anglers are not taking advantage of them and an increase in education is needed to teach anglers about these species and methods of catching them.

There has been much interest in increasing fishing opportunities within urban fisheries. Recent creel surveys on Banner Lakes have shown that fall/winter put-and-take urban trout fisheries in the state can be profitable. We discovered an average return of \$1.68 for every dollar spent on put-and-take trout stockings in Banner Lakes. Additionally, 80% - 90% of each trout stocking was harvested by the end of the season.